

Application No. 10/031,752
Response filed December 17, 2003
Reply to Office Action dated September 17, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-31 (cancelled)

32. (Previously Presented) A method, comprising administering to an animal between 1 hour and 28 days of age, an amount of a mycobacterial cell wall extract, wherein the amount is effective to activate the immune system of the animal or to enhance production performance of the animal.

33. (Previously Presented) The method of Claim 32, wherein the administration to the animal occurs between 1 hour and 4 days of age.

34. (Previously Presented) The method of Claim 32, wherein the administration to the animal occurs between 1 hour and 24 hours of age.

35. (Previously Presented) The method of Claim 32, wherein the mycobacterial cell wall extract is prepared from family *Mycobacteriaceae*, genus *Mycobacterium*, or species *Mycobacterium phlei*.

36. (Previously Presented) The method of Claim 32, wherein activation of the immune system comprises activation of white blood cells.

37. (Previously Presented) The method of Claim 36, wherein the white blood cells are group T-lymphocytes or monocytes.

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38. (Previously Presented) The method of Claim 37, wherein the T-lymphocytes are CD4⁺ T lymphocytes.

39. (Previously Presented) The method of Claim 38, wherein the CD4⁺ T lymphocytes are CD25⁺CD4⁺ T lymphocytes or MHC Class II⁺CD4⁺ T lymphocytes.

40. (Previously Presented) The method of Claim 37, wherein the monocytes are MHC Class II⁺ monocytes.

41. (Previously Presented) The method of Claim 36, wherein the activated white blood cells display enhanced production of IFN- γ in response to a stimulus.

42. (Previously Presented) The method of Claim 32, wherein the enhancement of production performance is an increase in the average daily weight gain of the animal or an increase in efficiency of feed use.

43. (Previously Presented) The method of Claim 32, wherein the enhancement of production performance is a decrease in the mortality of the animal, a decrease in the number of treatment days necessary to maintain the health of the animal, a decrease in the cost of treatment necessary to maintain the health of the animal, or any combination thereof.

44. (Previously Presented) The method of Claim 32, wherein the animal is a mammal, bird, fish, amphibian or crustacean.

45. (Previously Presented) The method of Claim 32, wherein the animal is domestic food animal.

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46. (Previously Presented) The method of Claim 45, wherein the domestic food animal is a calf, a chick, a piglet, a kid, a fawn or a lamb.

47. (Previously Presented) The method of Claim 45, wherein the domestic food animal is a calf of a domestic cow.

48. (Previously Presented) The method of Claim 45, wherein the domestic food animal is a chick of a domestic fowl.

49. (Previously Presented) The method of Claim 32, wherein the mycobacterial cell wall extract is combined with a pharmaceutically acceptable carrier.

50. (Previously Presented) The method of Claim 32, wherein the administration is subcutaneous, intravenous, intramuscular, intraperitoneal or oral.

51. (Previously Presented) The method of Claim 32, wherein the amount of the mycobacterial cell wall extract administered to the animal is from about 0.001 μg per kg to about 600 μg per kg per dose.

52. (Previously Presented) The method of Claim 32, wherein the amount of the mycobacterial cell wall extract administered to the animal is from about 0.01 μg per kg to about 400 μg per kg per dose.

53. (Previously Presented) The method of Claim 32, wherein the amount of the mycobacterial cell wall extract administered to the animal is from about 0.1 μg per kg to about 200 μg per kg per dose.